United States Department of the Interior

NATIONAL PARK SERVICE
Air Resources Division
P.O. Box 25287
Denver, CO 80225

IN REPLY REFER TO:

January 8, 2002

N3615 (2350)

Alex Piliaris
Washington Department of Ecology
Air Quality Program
P.O. Box 47600
Olympia, Washington 98504-7600

Dear Mr. Piliaris:

We have reviewed the Satsop CT Project (Satsop) Prevention of Significant Deterioration (PSD) permit application for the proposed modification to its Elma, Washington, power generation facility. The Satsop facility is located approximately 58 kilometers (km) south of Olympic National Park (NP) and 90 km west of Mount Rainier NP, both are Class I air quality areas administered by the National Park Service (NPS). Satsop is planning to modify the current facility under construction (Phase I) by adding two natural gas turbines and one steam turbine (Phase II). The PSD permit application analyses address the combined emissions and operations of Phase I and Phase II for the Satsop project. The combined modifications to the Satsop facility will cause nitrogen oxide (NO_x) to increase by 588 tons per year (TPY), sulfur dioxide (SO_2) to increase by 23 TPY, particulate matter to increase by 436 TPY, and volatile organic compounds to increase by 195 TPY.

Based on our review of the permit application, we find that the proposed emission increases from the Satsop facility will not have any adverse impacts at Olympic NP or Mount Rainier NP. However, we do have the following comments regarding Best Available Control Technology (BACT) for the facility.

We understand from the application, that Satsop proposes using a combination of dry low-NO_x combustor technology with selective catalytic reduction (SCR) as BACT. Satsop states that this technology provides for NO_x reduction to a level of 2.5 ppm at 15 percent oxygen. We agree that dry low-NO_x/SCR is BACT for this project. However, we believe that this technology can achieve an emission level lower than the 2.5 ppm proposed by Satsop. For example, Washington State has recently proposed to permit two Siemens-Westinghouse combined cycle combustion turbines at 2 ppm when burning gas at the Sumas facility. On February 23, 2001, Washington State issued a PSD permit to Goldendale Energy, Inc. which included a BACT determination that this 249 MW combined cycle combustion turbine facility

(with duct burners) would also meet a 3-hour NO_x limit of 2 ppm. There are numerous other similar sources that have been controlled to 2 ppm using SCR. A 2 ppm NO_x limit would reduce the gas-burning NO_x emissions from this source by 20%. The EPA New Source Review Workshop Manual states that "it is presumed that the source can achieve the same emission reduction level as another source unless the applicant demonstrates that there are source-specific factors or other relevant information that provide a technical, economic, energy or environmental justification to do otherwise."[1] It would be helpful if Satsop could explain any differences between their proposed BACT and the control technology used at the Sumas and Goldendale plants to justify the higher NO_x emission levels in their Elma, Washington facility.

Thank you for the opportunity to review the Satsop PSD application. If you have any questions concerning our review of the permit application please contact Mr. Dee Morse of my staff at (303) 969-2817.

Sincerely,

John Bunyak
Chief, Policy, Planning and Permit Review Branch

cc:
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[1] New Source Review Workshop Manual, EPA, 1990, p. B.24